

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Original) An article carrier for supporting articles above an outer body surface of vehicle, said article carrier comprising:

a pair of support rails adapted to be secured to said outer body surface generally parallel to one another and in spaced apart relation to one another, each said support rail forming a channel;

at least one cross bar having a length sufficient to span between said support rails, said cross bar having a pair of opposing ends with a locking mechanism disposed at each one of said opposing ends, each said locking mechanism including:

a housing for engaging with said channel of an associated one of said support rails;

an actuating member having a manually engageable portion for facilitating engagement of said actuating member within at least one finger of an individual, a camming surface and an attachment portion, said actuating member being pivotally mounted on said housing such that said manually engageable portion can be rotated, thereby causing rotating of said actuating member without said actuating member interfering with said outer body surface;

a locking pin disposed for linear movement within said housing and including a cam follower surface for engaging with said camming surface of said actuating member, said camming surface operating to urge said locking pin linearly out of engagement with

said associated one of said support rails when said actuating member is moved to an unlocked position;

a biasing member for urging said locking pin into locking engagement with said associated one of said support rails when said actuating member is placed in a locked position;

an elongated member extending within said cross bar and coupled at a first end thereof to said attachment portion of one of said actuating members, and being operably coupled at a second end thereof to said locking pin of said actuating member at said opposing end of said cross bar; and

wherein movement of one of said actuating members from said locked to said unlocked positions causes a generally simultaneous movement of said locking pin at the other one of said actuating members, thereby disengaging both of said locking pins from their respective said support rails generally simultaneously.

2. (Original) The article carrier of claim 1, wherein said cam follower surface of said locking pin comprises a post extending generally transversely of a longitudinal axis of said locking pin.

3. (Original) The article carrier of claim 1, wherein said cam follower surface of said locking pin comprises a pair of posts extending in opposite directions from one another;

and wherein said camming surface of said actuating member comprises a pair of spaced apart curved surfaces for engaging with said pair of posts.

4. (Original) The article carrier of claim 1, wherein said elongated member comprises first and second lengths; and

wherein said article carrier further comprises a central biasing element disposed within said cross bar and interposed between said first and second lengths of said elongated member to ensure that no slack develops between said first and second lengths.

5. (Original) The article carrier of claim 1, wherein said elongated member comprises a cable.

6. (Original) The article carrier of claim 1, wherein said elongated member comprises a cable having first and second lengths; and

wherein said article carrier further comprises a central biasing element interposed between said first and second lengths to form an intermediate section of said cable.

7. (Original) The article carrier of claim 1, wherein said locking pin includes an elongated slot; and

wherein said housing includes a pivot pin extending through said elongated slot for pivotally supporting said actuating member within said housing, said

elongated slot enabling said locking pin to be moved linearly within said housing while said actuating member is in said locked position.

8 (Original) An article carrier for supporting articles above an outer body surface of vehicle, said article carrier comprising:

a pair of support rails adapted to be secured to said outer body surface generally parallel to one another and in spaced apart relation to one another, each said support rail forming a channel;

at least one cross bar having a length sufficient to span between said support rails, said cross bar having a pair of opposing ends with a locking mechanism disposed at each one of said opposing ends, each said locking mechanism including:

a housing for engaging with said channel of an associated one of said support rails and moveable along said channel, said housing having a recess formed in an outer surface thereof;

an actuating member having a manually engageable lever for facilitating engagement of said actuating member within at least one finger of an individual, a camming surface and an attachment portion;

a pivot pin disposed in said housing for supporting said actuating member for pivotal movement relative to said housing;

said lever being rotatable about said pivot pin, thereby causing rotation of said actuating member without said actuating member interfering with said outer body surface;

a locking pin disposed for linear movement within said housing and including a cam follower surface for engaging with said camming surface of said actuating

member, said camming surface operating to urge said locking pin linearly out of engagement with said associated one of said support rails when said actuating member is moved to an unlocked position;

a biasing member for urging said locking pin into locking engagement with said associated one of said support rails when said actuating member is placed in a locked position;

said actuating member being disposed within said recess when in said locked position and said lever projecting outwardly of said housing when said actuating member is in said locked position;

a cable extending within said cross bar and coupled at a first end thereof to said attachment portion of one of said actuating members, and being coupled at a second end thereof to said locking pin of said actuating member at said opposing end of said cross bar; and

wherein movement of one of said actuating members from said locked position to said unlocked position causes a generally simultaneous movement of said locking pin at the other one of said actuating members, thereby disengaging both of said locking pins from their respective said support rails generally simultaneously.

9. (Original) The apparatus of claim 8, wherein said cable is comprised of first and second sections coupled together by a central biasing element.

10. (Original) The apparatus of claim 8, wherein said cam follower surface comprises a post extending generally transversely of a longitudinal axis of said locking pin.

11. (Original) The apparatus of claim 8, wherein said cam follower surface comprises a pair of posts extending transversely of said locking pin.

12. (Original) The apparatus of claim 8, wherein said locking pin includes an elongated slot for receiving said pivot pin therethrough, said elongated slot enabling linear movement of said locking pin within said housing without interference from said pivot pin.

13. (Original) The apparatus of claim 8, further comprising a pair of said cables, and

wherein each actuating member of each said housing is coupled via one of said cables with said locking pin of the other said housing, such that moving either one of said actuating members to said unlocked position causes both of said locking pins to be generally simultaneously moved into said unlocked position.

14 (Original) A cross bar adapted to be used with a pair of support rails, where the support rails are secured to an outer body surface of a vehicle, for supporting articles thereon above said outer body surface, said cross bar comprising:

a tubular portion having opposite end portions:

a housing disposed at each of said opposite end portions;

each said housing including:

a pivotally mounted actuating member mounted therein and moveable between a locked position and an unlocked position, said actuating member having a first camming surface;

a locking pin disposed for linear movement therein and adapted to engage a respective one of said support rails to lock its associated said housing at a specific position along its associated said support rail, said locking pin including a second camming surface engageable with said first camming surface to enable said locking pin to be cammingly urged linearly into engagement with its respective said support rail when said actuating member is moved into said locked position, and moved out of locking engagement with said associated support rail when said actuating member is moved into said unlocked position;

a biasing element for urging said locking pin into engagement with said associated support rail when said actuating member is urged into said locked position;

an elongated coupling element for connecting said actuating member with said locking pin of the other said housing; and

wherein movement of one of said actuating members into said locked position causes said locking pin within each of said housings to be urged substantially simultaneously into engagement with their associated said support rails, thereby permitting said cross bar to be repositioned along said support rails; and

wherein movement of one of said actuating members into said locked position causes both of said locking pins to be urged substantially simultaneously into engagement with its associated said support rail.

15. (Original) The cross bar of claim 14, wherein said elongated coupling element comprises a cable having first and second sections coupled together by a central biasing element, said central biasing element operating to maintain said cable taut between said actuating member and said locking member between which it is coupled.

16. (Original) The cross bar of claim 14, further comprising:

a pair of elongated coupling elements, each said coupling element having first and second sections;

a pair of central biasing elements, with one of said central biasing elements being secured between said first and second sections of a respective one of said coupling elements;

said central biasing elements operating to maintain each said elongated coupling element taut.

17. (Original) The cross bar of claim 14, wherein each said locking pin includes an elongated slot through which said pivot pin of its associated said housing projects, to thereby permit linear as well as pivoting movement of said actuating member.

18. (Original) The cross bar of claim 14, wherein said locking pin is disposed within said housing so as to be concealed regardless if said actuating member is in said locked position or said unlocked position.

19. (New) An article carrier for supporting articles above an outer body surface of vehicle, said article carrier comprising:

a pair of support rails adapted to be secured to said outer body surface generally parallel to one another and in spaced apart relation to one another, each said support rail having an attachment area;

at least one cross bar having a length sufficient to span between said support rails, said cross bar having a pair of opposing ends with a locking mechanism disposed at each one of said opposing ends, each said locking mechanism including:

a housing for engaging with said attachment area of an associated one of said support rails;

an actuating member having a manually engageable portion for facilitating engagement of said actuating member within at least one finger of an individual, a camming surface and an attachment portion, said actuating member being pivotally mounted on said housing such that said manually engageable portion can be rotated, thereby causing rotating of said actuating member without any portion of said actuating member interfering with said outer body surface;

a locking element disposed for movement within said housing and including a cam follower surface for engaging with said camming surface of said actuating member, said camming surface operating to urge said locking element out of engagement with said

associated one of said support rails when said actuating member is moved to an unlocked position;

an elongated member extending co-extensively with said cross bar and operatively coupled with at least one of said actuating members of one of said locking mechanisms and said locking element at the other of said locking mechanisms at an opposing end of said cross bar; and

wherein movement of one of said actuating members from said locked to said unlocked positions causes a generally simultaneous movement of said locking element at the other one of said locking mechanisms to disengage both of said locking elements from their respective said support rails generally simultaneously.

20. (New) The article carrier of claim 19, wherein said cam follower surface of said locking pin comprises a post extending generally transversely of a longitudinal axis of said locking pin.

21. (New) The article carrier of claim 19, further comprising a biasing element disposed within each said locking mechanism for urging its associated said locking element into locking engagement with its associated said support rail.

22. (New) The article carrier of claim 19, wherein each said support rail includes a plurality of spaced apart openings for engaging with its associated said locking element when said associated locking element is in said locked position.

23. (New) The article carrier of claim 19, wherein each said locking mechanism further includes:

said actuating member being supported by a pivot pin from said housing; and

said locking element includes a linear slot; and

wherein said pivot pin extends through said linear slot so as not to interfere with movement of said locking element as said locking element is urged between said locked and unlocked positions by said actuating member.

24. (New) The article carrier of claim 19, wherein said actuating member of each of said locking mechanisms is coupled to said locking element at said opposing end of said cross bar by an associated length of cable.

25. (New) The article carrier of claim 24, further comprising a biasing element coupled to each of said lengths of cable to take up slack in said lengths of cable.

26. (New) The article carrier of claim 24, wherein said locking element comprises a locking pin.

27. (New) The article carrier of claim 19, wherein:

said locking element comprises a locking pin having a slot formed therein;

said cam follower includes at least one laterally extending post projecting from said locking pin;

said actuating member is supported on said housing by a pivot pin;

said pivot pin extends through said slot when said locking mechanism is assembled; and

said camming surface of said actuating member engages said at least one post when being moved to said unlocked position, to thus urge said locking pin out of locking engagement with its associated said support rail.

28. (New) An article carrier for supporting articles above an outer body surface of vehicle, the article carrier comprising:

a pair of support rails adapted to be secured to said outer body surface generally parallel to one another and in spaced apart relation to one another, each said support rail having an attachment area;

at least one cross bar having a length sufficient to span between said support rails, said cross bar having a pair of opposing ends with a locking mechanism disposed at each one of said opposing ends, each said locking mechanism including:

a housing for engaging with said attachment area of an associated one of said support rails;

an actuating member having a manually engageable portion for facilitating engagement of said actuating member within at least one finger of an individual, a camming surface, and said actuating member being pivotally mounted on said housing such that said manually engageable portion can be rotated, thereby causing rotation of said actuating member without any portion of said actuating member interfering with said outer body surface;

a locking element disposed for movement within said housing towards and away from an associated one of said support rails, said camming surface operating to urge said locking element out of engagement with said associated one of said support rails when said actuating member is moved to an unlocked position;

an elongated member extending co-extensively with said cross bar and operatively coupled with one of said actuating members of one of said locking mechanisms and operatively coupled with said locking element at the other of one of said locking mechanisms; and

wherein movement of one of said actuating members from said locked to said unlocked positions causes a generally simultaneous movement of said locking element at the other one of said locking mechanisms to thereby disengage both of said locking elements from their respective said support rails generally simultaneously.

29. (New) A single sided releasable article carrier adapted to mounted on a surface of a motor vehicle, comprising:

a pair of elongated support rails adapted to be fixedly secured in spaced apart relation to one another on said surface of said motor vehicle, each said support rail including a plurality of spaced apart attachment portions;

a cross bar having a locking mechanism at least end thereof, said locking mechanism including:

a housing;

an actuating member pivotally supported on said housing, said actuating member including a camming surface and an attachment portion;

a locking element supported for movement within said housing and engageable with one of said plurality of attachment areas of an associated one of said support rails;

an elongated coupling member extending co-extensively with said cross bar that is operatively secured to said attachment portion at one end and to said locking element at the other one of said locking mechanisms at a second end thereof; and

wherein rotational movement of said actuating member causes said locking element to be released from engagement with said one of said plurality of attachment areas while said elongated coupling member is generally simultaneously urged to release said locking element at the other one of said locking mechanisms.